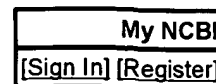
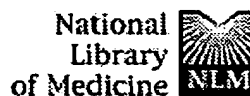
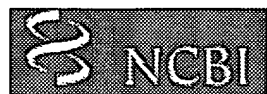


Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"5496872".did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 15:28
S1	1757	530/324.ccls. and coupling	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:39
S2	1334	530/324.ccls. and coupling SAME peptide	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:40
S3	0	530/324.ccls. and coupling SAME peptide and "NH-CO-A-CO-S"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:40
S4	0	"NH-CO-A-CO-S"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:40
S5	0	"NH-CO-A-CO"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:40
S6	3	530/324.ccls. and coupling SAME peptide and alkylene and arylene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:41
S7	247	coupling SAME peptide and alkylene and arylene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:41
S8	202	coupling SAME peptide and alkylene SAME arylene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:41

S9	3	coupling SAME peptide SAME alkylene SAME arylene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 15:25
----	---	---	---	----	----	------------------



All Databases

PubMed

Nucleotide

Protein

Genome

Structure

OMIM

PMC

Journals

Books

Search **PubMed** for **bradykinin and dimers** **Preview** **Go** **Clear**

Limits **Preview/Index** **History** **Clipboard** **Details**

- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

About Entrez

Text Version

Entrez PubMed

Overview

Help | FAQ

Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

Special Queries

LinkOut

My NCBI (Cubby)

Related Resources

Order Documents

NLM Catalog

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

Search

Most Recent Queries

Time Result#4 Search **bradykinin and dimers**15:07:21 15#3 Search **stewart and bradykinin and dimers**15:07:10 4#2 Search **stewart and bradykinin and 1999**14:53:11 4#1 Search **stewart and bradykinin**14:53:05 173**Clear History**Write to the Help DeskNCBI | NLM | NIHDepartment of Health & Human ServicesPrivacy Statement | Freedom of Information Act | Disclaimer

May 2 2005 17:45:08

E-Mail Noble - SEARCH

=> d his full

(FILE 'HOME' ENTERED AT 13:11:45 ON 13 MAY 2005)

FILE 'HCAPLUS' ENTERED AT 13:11:51 ON 13 MAY 2005

L1 1 SEA ABB=ON PLU=ON (GB2000-12083# OR GB1999-20397# OR
WO2000-GB3306#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 13:13:58 ON 13 MAY 2005

FILE 'HCAPLUS' ENTERED AT 13:14:01 ON 13 MAY 2005

L2 TRA L1 1- RN : 47 TERMS

FILE 'REGISTRY' ENTERED AT 13:14:01 ON 13 MAY 2005

L3 47 SEA ABB=ON PLU=ON L2
L4 26 SEA ABB=ON PLU=ON L3 AND S/ELS
L5 19 SEA ABB=ON PLU=ON L4 AND S=1
L6 1 SEA ABB=ON PLU=ON L5 AND C59H83N12O37P5S
L7 STR
L8 0 SEA CSS SAM L7
L9 SCR 2039 OR 2041 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 OR 204
L10 SCR 2007 AND 2021 AND 1993
L11 0 SEA CSS SAM L7 AND L10 NOT L9
L12 0 SEA CSS FUL L7 AND L10 NOT L9
L13 0 SEA SSS SAM L7 AND L10 NOT L9
L14 14 SEA SSS FUL L7 AND L10 NOT L9

FILE 'HCAPLUS' ENTERED AT 13:47:35 ON 13 MAY 2005

FILE 'REGISTRY' ENTERED AT 13:47:39 ON 13 MAY 2005
SAV TEM AUD222F2/A L14

FILE 'HCAPLUS' ENTERED AT 13:47:54 ON 13 MAY 2005

L15 5 SEA ABB=ON PLU=ON L14

FILE 'HCAOLD' ENTERED AT 13:48:05 ON 13 MAY 2005

L16 2 SEA ABB=ON PLU=ON L14
SEL AN
EDIT E1-E2 /AN /OREF

FILE 'HCAPLUS' ENTERED AT 13:48:29 ON 13 MAY 2005

L17 2 SEA ABB=ON PLU=ON ("CA53:12186A"/OREF OR "CA56:11449G"/OREF)

L18 7 SEA ABB=ON PLU=ON L15 OR L17

=> b reg

FILE 'REGISTRY' ENTERED AT 13:50:24 ON 13 MAY 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAY 2005 HIGHEST RN 850400-93-0

DICTIONARY FILE UPDATES: 12 MAY 2005 HIGHEST RN 850400-93-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*

Search done by Noble Jarrell

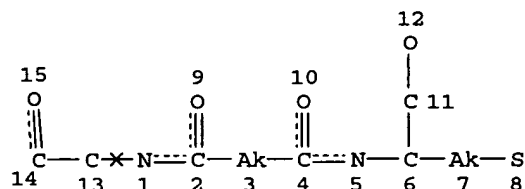
* The CA roles and document type information have been removed from *
 * the IDE default display format and the ED field has been added, *
 * effective March 20, 2005. A new display format, IDERL, is now *
 * available and contains the CA role and document type information. *
 * *****

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d que sta l14

L7 STR



NODE ATTRIBUTES:

CONNECT IS M1 RC AT 1
 CONNECT IS M2 RC AT 12
 CONNECT IS M1 RC AT 13
 CONNECT IS M1 RC AT 14
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L9 SCR 2039 OR 2041 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 O
 R 2043 OR 2054
 L10 SCR 2007 AND 2021 AND 1993
 L14 14 SEA FILE=REGISTRY SSS FUL L7 AND L10 NOT L9

100.0% PROCESSED 350225 ITERATIONS
 SEARCH TIME: 00.00.18

14 ANSWERS

=> b hcap

FILE 'HCAPLUS' ENTERED AT 13:50:45 ON 13 MAY 2005
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 May 2005 VOL 142 ISS 21

Search done by Noble Jarrell

FILE LAST UPDATED: 12 May 2005 (20050512/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr l18 tot

L18 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:66410 HCAPLUS
 DN 138:394839
 ED Entered STN: 28 Jan 2003
 TI Zinc complexation of glutathione and glutathione-derived peptides
 AU Gelinsky, M.; Vogler, R.; Vahrenkamp, H.
 CS Institut für Anorganische und Analytische Chemie der Universität Freiburg,
 Freiburg, D-79104, Germany
 SO Inorganica Chimica Acta (2003), 344, 230-238
 CODEN: ICHAA3; ISSN: 0020-1693
 PB Elsevier Science B.V.
 DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)
 Section cross-reference(s): 34
 OS CASREACT 138:394839
 AB Glutathione (γ -Glu-Cys-Gly, GSH, 1) forms a binary Zn complex L2Zn3
 (1.1) which is polymeric. Its triply blocked and purely S-functional form
 [4-NO₂-Bz]- γ -Glu(Cys-Gly-OEt)-OEt (2) yields a polymeric complex
 L2Zn (2.1) and a monomeric pyrazolylborate Zn complex TpZn-SR (2.2).
 Doubly O-protected GSH was converted with histidine and cysteine to the
 difunctional tetrapeptides NAc-His- γ -Glu(Cys-Gly-OEt)-OEt (3) and
 NAc-Cys- γ -Glu(Cys-Gly-OEt)-OEt (4). Peptide 3 could be converted to
 the oligomeric Zn halide complex L·ZnCl (3.1). The Zn complexation
 of peptide 4 was studied by potentiometric titrns., revealing that the
 dominating species in solution are [ZnL(LH)]- and [ZnL₂]²⁻, both with a ZnS₄
 coordination. In contrast, the isolated complex is the polymeric species
 LZn (4.1). With pyrazolylborate Zn units a monomeric dizinc complex
 TpZn-S.apprx..apprx.S-ZnTp (4.2) was obtained. N-protected GSH was
 extended by two histidine or cysteine units to the pentapeptides
 H- γ -Glu(Cys-Gly-His-OMe)-His-OMe (5) and H- γ -Glu(Cys-Gly-Cys-
 OMe)-Cys-OMe (6). Compds. 5 and 6 formed ill-defined polymeric Zn
 complexes. For 5, [L·Zn]ClO₄, and for 6, [L₃Zn₅]CF₃COO could be
 obtained anal. pure.
 ST glutathione deriv peptide prepn complexation zinc; zinc complex
 glutathione deriv peptide prepn
 IT Peptides, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (zinc complexes; preparation of zinc(II) complexes of glutathione and of
 glutathione-derived peptide derivs.)
 IT 183113-39-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (complexation with glutathione-derived peptides)
 IT 70-18-8, Glutathione, reactions 1499-46-3 27486-84-6 27486-87-9
 183498-47-7 302325-91-3 528530-58-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (for preparation of glutathione-derived peptides and their zinc(II)
 complexes)
 IT 528530-74-7P 528530-77-0P 528530-80-5P 528530-82-7P 528530-84-9P
 528530-86-1P 528530-88-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (for preparation of glutathione-derived peptides and their zinc(II)
 complexes)
 IT 528530-61-2P 528530-64-5P 528530-66-7P 528530-69-0P
 528530-72-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and complexation with zinc(II))

- IT 7440-66-6DP, Zinc, complexes of glutathione-derived peptides
 35436-84-1DP, zinc complex 528530-63-4DP, zinc complex 528530-68-9DP,
 zinc chloro complex 528530-71-4DP, zinc complex 528530-90-7P
 528530-92-9P 528530-96-3P 528530-98-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
- IT 122-04-3, 4-Nitrobenzoyl chloride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (protecting group for preparation of glutathione-derived peptides and their
 zinc(II) complexes)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; Metal Ions in Biological Systems 1973
- (2) Bae, W; Biochem Biophys, Res Comm 1997, V237, P16 HCAPLUS
- (3) Bae, W; J Inorg Biochem 1997, V68, P201 HCAPLUS
- (4) Bodansky, M; Principles of Peptide Synthesis 1984
- (5) Bodansky, M; The Practice of Peptide Synthesis 1984
- (6) Brand, U; Inorg Chem 2001, V40, P6151 HCAPLUS
- (7) Christianson, D; Adv Protein Chem 1991, V42, P281 HCAPLUS
- (8) Corrie, A; J Chem Soc, Dalton Trans 1976, P1012 HCAPLUS
- (9) Dilworth, J; Adv Inorg Chem 1993, V40, P411
- (10) Forster, M; Chem Ber 1993, V126, P2643
- (11) Forster, M; Chem Ber 1995, V128, P541
- (12) Fuhr, B; J Am Chem Soc 1973, V95, P6944 HCAPLUS
- (13) Gelinsky, M; Eur J Inorg Chem 2002, P2458 HCAPLUS
- (14) Gockel, P; Chem Ber 1996, V129, P887 HCAPLUS
- (15) Gockel, P; Inorg Chim Acta 1998, V272, P115 HCAPLUS
- (16) Gockel, P; Inorg Chim Acta 2001, V323, P16 HCAPLUS
- (17) Johannning, J; Angew Chem, Int Ed Engl 1998, V37, P2464 HCAPLUS
- (18) Krebs, B; Angew Chem Int, Ed Engl 1991, V30, P769
- (19) Meissner, A; unpublished results
- (20) Postal, W; J Inorg Biochem 1985, V25, P25 HCAPLUS
- (21) Rabenstein, D; FEBS Lett 1980, V121, P61 HCAPLUS
- (22) Rabenstein, D; Metal Ions in Biological Systems 1979, V9, P103 HCAPLUS
- (23) Rauser, W; Plant Physiol 1995, V109, P1141 HCAPLUS
- (24) Rombach, M; Inorg Chim Acta 2002, V334, P25 HCAPLUS
- (25) Vahrenkamp, H; Acc Chem Res 1999, V32, P589 HCAPLUS
- (26) Vallee, B; Acc Chem Res 1993, V26, P543 HCAPLUS
- (27) Vogler, R; Inorg Chim Acta 2002, V329, P1

IT 528530-88-3P

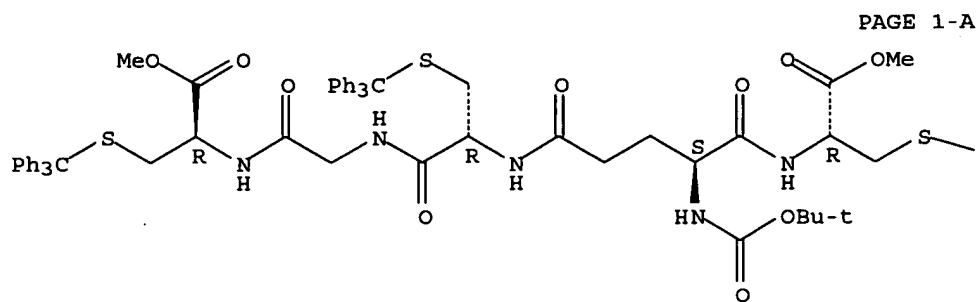
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(for preparation of glutathione-derived peptides and their zinc(II)
 complexes)

RN 528530-88-3 HCAPLUS

CN L-Cysteine, S-(triphenylmethyl)-L-cysteinylglycyl-S-(triphenylmethyl)-,
 methyl ester, (1'→1)-amide with N-[(1,1-dimethylethoxy)carbonyl]-L-
 α -glutamyl-S-(triphenylmethyl)-L-cysteine 2'-methyl ester (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.



PAGE 1-B

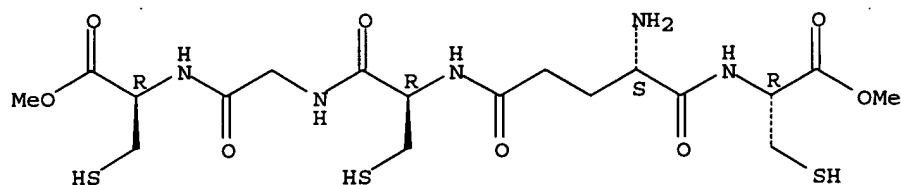
—CPh₃

IT 528530-72-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and complexation with zinc(II))
 RN 528530-72-5 HCAPLUS
 CN L-Cysteine, L-cysteinylglycyl-, methyl ester, (1'→1)-amide with
 L-α-glutamyl-L-cysteine 2'-methyl ester, mono(trifluoroacetate)
 (salt) (9CI) (CA INDEX NAME)

CM 1

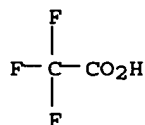
CRN 528530-71-4
 CMF C18 H31 N5 O8 S3

Absolute stereochemistry.



CM 2

CRN 76-05-1
 CMF C2 H F3 O2



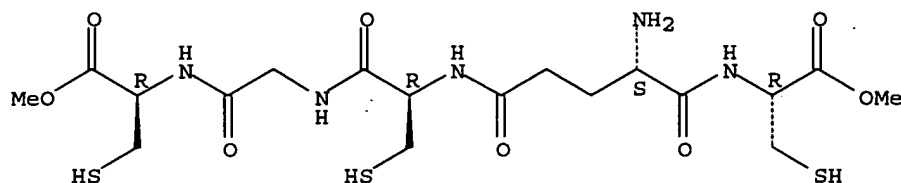
IT 528530-71-4DP, zinc complex
 RL: SPN (Synthetic preparation); PREP (Preparation)

Search done by Noble Jarrell

(preparation of)

RN 528530-71-4 HCAPLUS
 CN L-Cysteine, L-cysteinylglycyl-, methyl ester, (1'→1)-amide with
 L-α-glutamyl-L-cysteine 2'-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:866867 HCAPLUS
 DN 137:370487
 ED Entered STN: 15 Nov 2002
 TI Manufacture of polydisulfides by ring-opening polymerization of cyclic
 disulfides
 IN Kudo, Hiroto; Endo, Takeshi
 PA JSR Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C08G075-14
 CC 35-5 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 28

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002327061	A2	20021115	JP 2001-132057	20010427
PRAI	JP 2001-132057		20010427		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002327061	ICM	C08G075-14

AB Polydisulfides are manufactured by ring-opening polymerization of cyclic disulfides obtained from dithiols having cysteine groups at the both terminals. Thus, L-Cys Me ester HCl salt was amidated with pimeloyl dichloride, dimerized, and polymerized at 100° for 24 h in DMF to give 90% a polydisulfide with average mol. weight 25,000.

ST cyclic cysteine ring opening polymn; dithiol cyclic ring opening polymn; polydisulfide manuf ring opening polymn

IT Polysulfides
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (polyamide-; manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

IT Polyamides, preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (polysulfide-; manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

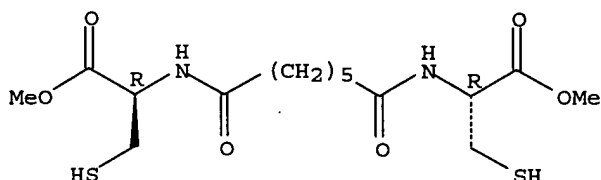
IT Polymerization
 (ring-opening; manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

IT 474511-29-OP 474511-30-3P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

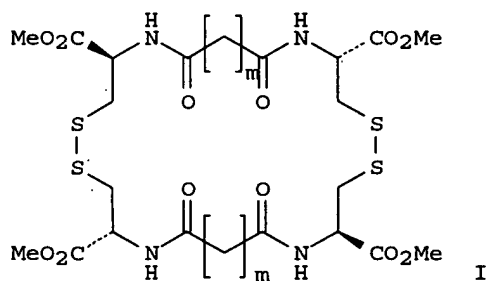
IT 256953-91-OP 400652-92-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

IT 142-79-0, Pimeloyl dichloride 18598-63-5, L-Cysteine Methyl ester hydrochloride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)
 IT 400652-92-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)
 RN 400652-92-8 HCAPLUS
 CN L-Cysteine, N,N'-(1,7-dioxo-1,7-heptanediyl)bis-, dimethyl ester (9CI)
 (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L18 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:749822 HCAPLUS
 DN 136:200456
 ED Entered STN: 15 Oct 2001
 TI Efficient synthesis of macrocycles by oxidation of cysteine-based dithiols
 AU Kudo, H.; Sanda, F.; Endo, T.
 CS Chemical Resources Laboratory, Tokyo Institute of Technology, Midori-ku, Yokohama, 226-8503, Japan
 SO Tetrahedron Letters (2001), 42(44), 7847-7850
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 CC 34-3 (Amino Acids, Peptides, and Proteins)
 Section cross-reference(s): 28
 OS CASREACT 136:200456
 GI



AB The cysteine-bridged macrocycles I ($m = 1-6$), 22-32-membered cyclic dimers could be synthesized with a high reagent concentration (1 M) in excellent yields by the oxidation of the cysteine-based compds. having dithiol groups.
 ST cysteine methyl ester amidation alkanedicarboxyl chloride; dithiol cysteine based prepn dimerization polymn; macrocyclic amide polymethylene bridged prepn; polymer cysteine bridged prepn
 IT Acid halides
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (chlorides, diacid; preparation of cysteine-bridged macrocycles via oxidation)

of dithiols)

IT Macrocyclic compounds
RL: SPN (Synthetic preparation); PREP (Preparation)
(cysteine-bridged, amides; preparation by oxidation of cysteine-based dithiols)

IT Thiols (organic), preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(dithiols, cysteine-based; preparation of cysteine-bridged macrocycles by
oxidation of cysteine-based dithiols)

IT Oxidation
(of cysteine-based dithiols to cysteine-bridged macrocycles)

IT 111-50-2, Hexanedioyl dichloride 142-79-0, Heptanedioyl dichloride
543-20-4, Succinoyl chloride 1663-67-8, Malonyl chloride 2485-62-3,
L-Cysteine methyl ester 2873-74-7, Pentanedioyl dichloride 10027-07-3,
Octanedioyl dichloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cysteine-based dithiols for oxidation to cysteine-bridged
macrocycles)

IT 400652-95-1P 400652-96-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of cysteine-based polymers)

IT 400652-88-2
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

IT 400652-89-3P 400652-90-6P 400652-91-7P
400652-92-8P 400652-93-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

IT 256953-80-7P 256953-88-5P 256953-91-0P 256953-95-4P 400652-94-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

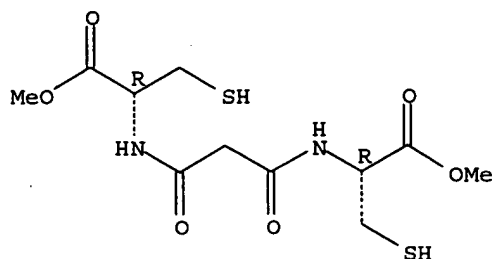
- (1) Bach, A; J Am Chem Soc 1994, V116, P3207 HCAPLUS
- (2) Carey, R; Molecular Conformation and Biological Interactions 1991, P457
HCAPLUS
- (3) Chreng, R; Science 1996, V271, P342
- (4) Gante, J; Angew Chem, Int Ed Engl 1994, V33, P1699
- (5) Garcia-Echeverria, C; J Am Chem Soc 1993, V115, P11663 HCAPLUS
- (6) Ghadiri, M; Nature 1993, V366, P324 HCAPLUS
- (7) Ghadiri, M; Nature 1994, V369, P301 HCAPLUS
- (8) Goodman, M; Burger's Medicinal Chemistry and Drug Discovery 1995, V1, P803
- (9) Grove, A; J Am Chem Soc 1993, V115, P5919 HCAPLUS
- (10) Hartgelink, J; J Am Chem Soc 1996, V118, P43
- (11) Haubner, R; J Am Chem Soc 1996, V118, P7881 HCAPLUS
- (12) Hirschmann, R; J Am Chem Soc 1992, V114, P9217 HCAPLUS
- (13) Hruby, V; Med Res Rev 1989, V9, P343 HCAPLUS
- (14) Jackson, S; J Am Chem Soc 1994, V116, P3220 HCAPLUS
- (15) Karle, I; Acta Crystallogr 1975, VB31, P555 HCAPLUS
- (16) Karle, I; J Am Chem Soc 1988, V110, P1958 HCAPLUS
- (17) Karle, I; J Am Chem Soc 1996, V118, P10916 HCAPLUS
- (18) Kishore, R; J Am Chem Soc 1985, V107, P8019 HCAPLUS
- (19) Marrone, T; J Am Chem Soc 1992, V114, P7542 HCAPLUS
- (20) Ranganathan, D; J Am Chem Soc 1998, V120, P2695 HCAPLUS
- (21) Ranganathan, D; J Org Chem 1999, V64, P9230 HCAPLUS
- (22) Rizo, J; Annu Rev Biochem 1992, V61, P387 HCAPLUS
- (23) Sprengard, U; Angew Chem, Int Ed Engl 1996, V35, P321 HCAPLUS
- (24) Zhang, I; J Am Chem Soc 1997, V119, P2363

IT 400652-88-2
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

RN 400652-88-2 HCAPLUS

CN L-Cysteine, N,N'-(1,3-dioxo-1,3-propanediyl)bis-, dimethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 400652-89-3P 400652-90-6P 400652-91-7P

400652-92-8P 400652-93-9P

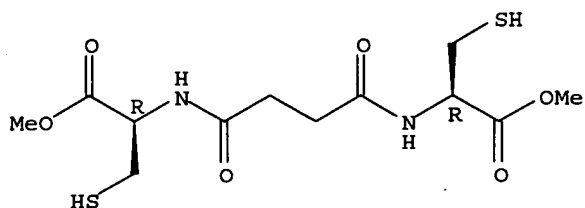
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

RN 400652-89-3 HCAPLUS

CN L-Cysteine, N,N'-(1,4-dioxo-1,4-butanediyl)bis-, dimethyl ester (9CI) (CA INDEX NAME)

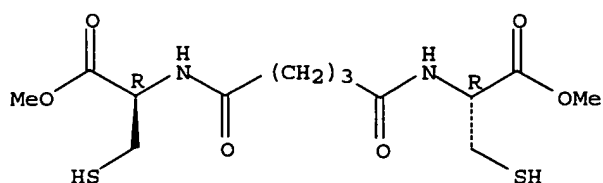
Absolute stereochemistry. Rotation (+).



RN 400652-90-6 HCAPLUS

CN L-Cysteine, N,N'-(1,5-dioxo-1,5-pentanediy)bis-, dimethyl ester (9CI) (CA INDEX NAME)

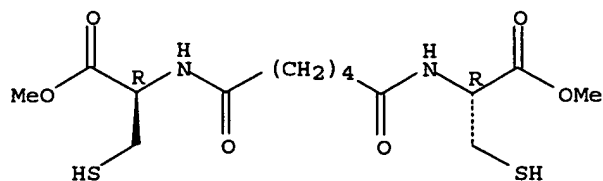
Absolute stereochemistry. Rotation (+).



RN 400652-91-7 HCAPLUS

CN L-Cysteine, N,N'-(1,6-dioxo-1,6-hexanediyl)bis-, dimethyl ester (9CI) (CA INDEX NAME)

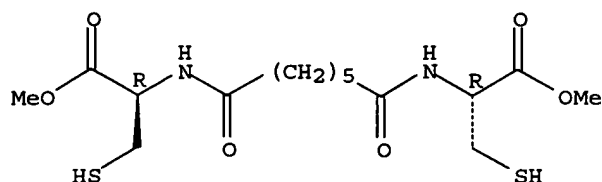
Absolute stereochemistry. Rotation (+).



RN 400652-92-8 HCAPLUS

CN L-Cysteine, N,N'-(1,7-dioxo-1,7-heptanediyl)bis-, dimethyl ester (9CI)
(CA INDEX NAME)

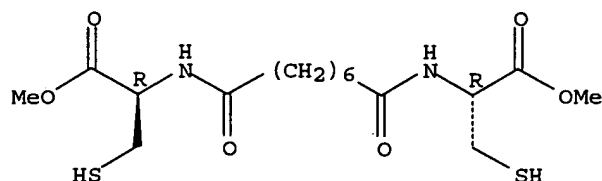
Absolute stereochemistry. Rotation (+).



RN 400652-93-9 HCAPLUS

CN L-Cysteine, N,N'-(1,8-dioxo-1,8-octanediyl)bis-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L18 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1976:165204 HCAPLUS

DN 84:165204

ED Entered STN: 12 May 1984

TI Insulin, insulin analogs, and derivatives

IN Geiger, Rolf; Obermeier, Rainer

PA Hoechst A.-G., Fed. Rep. Ger.

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT Patent

LA German

IC C07C; A61K

CC 34-4 (Synthesis of Amino Acids, Peptides, and Proteins)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2428412	A1	19760115	DE 1974-2428412	19740612
	NL 7506754	A	19751216	NL 1975-6754	19750606
	CH 613185	A	19790914	CH 1975-7416	19750609
	US 4014861	A	19770329	US 1975-585604	19750610
	CA 1044227	A1	19781212	CA 1975-229026	19750610
	DK 7502631	A	19751213	DK 1975-2631	19750611
	SE 7506695	A	19751215	SE 1975-6695	19750611
	AU 7582038	A1	19761216	AU 1975-82038	19750611
	BE 830186	A1	19751212	BE 1975-157293	19750612
	FR 2274605	A1	19760109	FR 1975-18372	19750612
	JP 51023290	A2	19760224	JP 1975-73026	19750612
	JP 58011427	B4	19830302		
	US 32015	B7	19851029	US 1979-22852	19790322
PRAI	DE 1974-2428412	A	19740612		
	US 1975-585604	A5	19750610		

CLASS

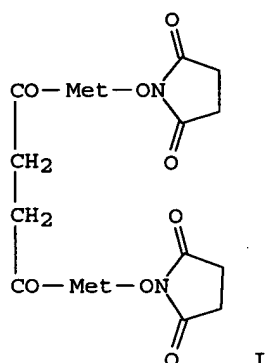
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 2428412	IC	C07CIC A61K
US 4014861	NCL	530/303.000; 530/409.000; 930/010.000; 930/DIG.621

US 32015

NCL

530/303.000; 530/339.000; 930/010.000; 930/260.000;
930/DIG.621

GI



AB Blocking the 1st residue of insulin A chain tetrasulfonate with the methionine derivative I followed by reaction with NB1-(trifluoroacetyl)insulin B chain disulfonate in 4-ethylmorpholine at pH 8-11 gave a methionine bridged insulin derivative which then underwent disulfide bridge formation in thioglycol under N followed by cleavage of the blocking groups and the methionine bridging group to give 38% insulin with biol. activity.

ST insulin methionine bridge

IT 59113-60-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking of)

IT 59006-17-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deesterification of)

IT 59006-18-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and reaction with hydroxysuccinimide)

IT 59006-19-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with insulin A chain tetrasulfonate)

IT 59217-92-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with insulin A chain tetrasulfonate methioine derivs.)

IT 18152-38-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with methionine derivs.)

IT 11137-90-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with trifluoroacetic acid methyl ester)

IT 59006-20-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 431-47-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with insulin derivs.)

IT 6066-82-6

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with methionine derivs.)

IT 108-30-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with methionine methyl ester)

IT 2491-18-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with succinic anhydride)

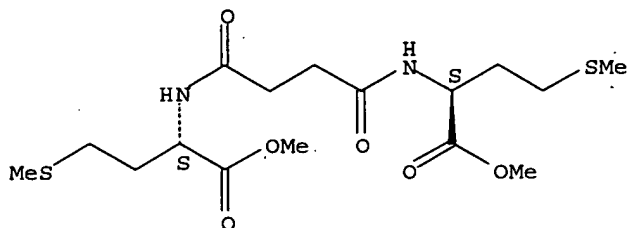
IT 11070-73-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (using methionine bridging groups)

IT 59006-17-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and deesterification of)

RN 59006-17-6 HCAPLUS

CN L-Methionine, N,N'-(1,4-dioxo-1,4-butanediyl)bis-, dimethyl ester (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

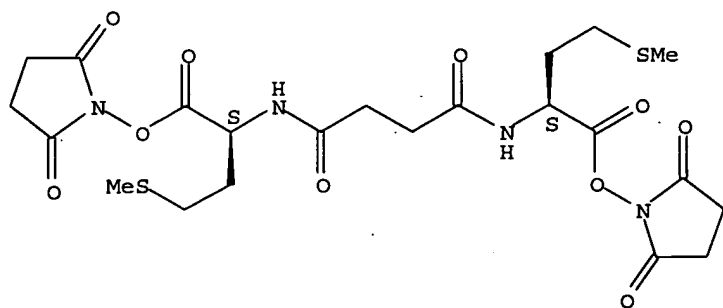


IT 59006-19-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reaction with insulin A chain tetrasulfonate)

RN 59006-19-8 HCAPLUS

CN Butanediamide, N,N'-bis[1-[[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]-3-(methylthio)propyl]-, [S-(R*,R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

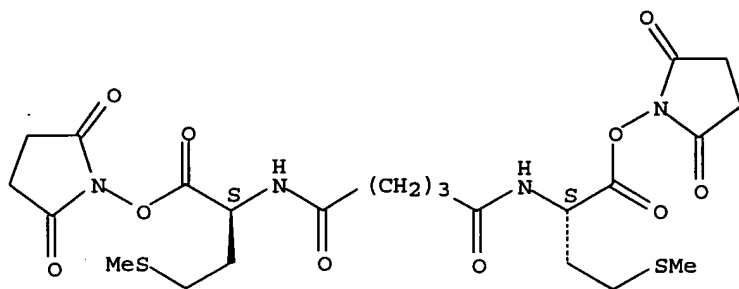


IT 59006-20-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 59006-20-1 HCAPLUS

CN Pentanediamide, N,N'-bis[1-[[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]-3-(methylthio)propyl]-, [S-(R*,R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1973:537505 HCAPLUS
 DN 79:137505
 ED Entered STN: 12 May 1984
 TI Sulfur-containing amino acid derivatives useful in therapeutics and in cosmetics
 IN Dussourd, Lucien; Cousse, Henri; Bonnaud, Bernard
 PA Fabre, Pierre, S. A.
 SO Fr. Demande, 8 pp. Div. of Fr. 2,159,183.
 CODEN: FRXXBL
 DT Patent
 LA French
 IC A61K; C07C; C07D
 CC 34-2 (Synthesis of Amino Acids, Peptides, and Proteins)
 Section cross-reference(s): 1, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2159183	A1	19730622	FR 1971-40215	19711109
	FR 2159183	B1	19750606		
PRAI	FR 1971-40215	A	19711109		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
------------	-------	------------------------------------

FR 2159183	IC	A61KIC C07CIC C07D
------------	----	--------------------

AB MeSCH₂CH₂CH(COR)NHCO(CH₂)₈CONHCH(COR)CH₂CH₂SMe (I, R = OH, ONa, OMe, NH₂) and related compds. were prepared for treating acne and seborrhea. Thus I (R = OH) was obtained by treating methionine with sebacoyl chloride.

ST methionine sebacoyl acne seborrhea

IT Acne

(bis(thiomethyl)piperazinedione for treatment of)

IT Seborrhea

(pyridoxine N-sebacoylmethioninate for treatment of)

IT Shampoos

(sodium N-sebacoylmethioninate containing)

IT 49761-96-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(acne treatment composition containing)

IT 49761-97-9 50794-98-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(antiseborrheal composition containing)

IT 49761-90-2P 49761-91-3P 49761-92-4P 49761-94-6P

49761-95-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

IT 111-19-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with methionine methyl ester)

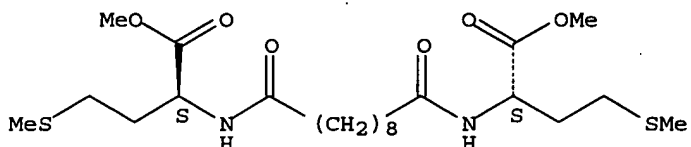
IT 10332-17-9 19298-72-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with sebacoyl chloride)

IT 111-20-6, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (with methioninamide)
 IT 63-68-3, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (with sebacoyl chloride)
 IT 49761-92-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 49761-92-4 HCAPLUS
 CN L-Methionine, N,N'-(1,10-dioxo-1,10-decanediyl)bis-, dimethyl ester (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1962:60315 HCAPLUS

DN 56:60315

OREF 56:11449f-h

ED Entered STN: 22 Apr 2001

TI Mucic acid derivatives

IN Morel, Charles J.

PA J. R. Geigy A.-G.

DT Patent

LA Unavailable

INCL 12P

CC 27 (Aliphatic Compounds)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CH 354788		19610731	CH	19570415

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
CH 354788	INCL 12P	

AB Compds. with strong antiphlogistic activity were prepared by treating mucic acid-N,N1-bis(aminocarboxylic acid) dialkyl ester with AcCl or AcBr in the presence of a tertiary organic base. Thus, a mixture of equal vols. mucic acid di-Et ester (m. 172°) and H2NCH2CO2Et were left 2 days at room temperature, and the reaction product was washed with ether to give mucyl-N, N1-bis(glycine) diethyl ester (I), m. 205-6° (H2O). A suspension of I 3.8 in pyridine 4 and CHCl3 50 treated at 0-10° with AcCl 3.3 and CHCl3 4 parts, heated 1.5 hrs. to reflux, washed with N HCl, NaHCO3 solution and H2O, dried and concentrated gave tetra-O-acetylmucyl-N,N1-bis(glycine) diethyl ester, m. 216-18° (MeOH). Similar RCO(CHOAc)4COR prepared were (R and m.p. given): 1-EtCO2CH2CH2CH(CO2Et)NH, 147-8° (MeOH); 1-EtCO2CH2CH(CO2Et)NH, 140-1° (EtOAc); 1-MeSCH2CH2CH(CO2Et)NH, 191-2° (EtOAc); EtCO2CH2NMe, 78-9° (alc); 1-EtCO2CHMeNH, 192-5° (alc.).

IT Aspartic acid, N,N'-galactaroyldi-, tetraethyl ester, tetraacetate, (-)-
 Glutamic acid, N,N'-galactaroyldi-, tetraethyl ester, tetraacetate, L-
 Glycine, N,N'-galactaroyldi-, diethyl ester
 Glycine, N,N'-galactaroyldi-, diethyl ester, tetraacetate
 Methionine, N,N'-galactaroyldi-, diethyl ester, tetraacetate, 1-

IT 526-99-8, Galactaric acid
 (derivs.)

IT 22634-92-0, Heptanedioic acid, 4-oxo-, dimethyl ester 101502-37-8,
 Alanine, N,N'-galactaroyldi-, diethyl ester, tetraacetate, L-

101502-38-9, Sarcosine, N,N'-galactaroyldi-, diethyl ester, tetraacetate
(preparation of)

L18 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1959:67464 HCAPLUS

DN 53:67464

OREF 53:121851,12186a-c

ED Entered STN: 22 Apr 2001

TI Tetraacetylmucyl-N,N1-bis(aminomonocarboxylic acid) dialkyl esters and
tetraacetylmucyl-N,N1-bis(aminodicarboxylic acid) tetraalkyl esters

PA J. R. Geigy Akt.-Ges.

DT Patent

LA Unavailable

CC 10B (Organic Chemistry: Aliphatic Compounds)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 807601		19590121	GB	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
------------	-------	------------------------------------

AB The title compds., having antiphlogistic action and useful for the treatment of inflammatory disorders, were prepared H₂NCH₂CO₂Et (I).HCl 14 added to tetraacetylmucic acid dichloride 21 in CHCl₃ 500, Et₃N 22 in CHCl₃ 75 parts added dropwise with stirring at 0-5°, the mixture stirred 3 hrs. at room temperature, the CHCl₃ solution washed with dilute HCl solution, NaHCO₃ solution, and H₂O, dried, the CHCl₃ distilled, and the residue recrystd. from MeOH gave ROC[CH(OAc)]₄COR (II) (R = NHCH₂CO₂Et) (III), m. 216-18°. An alternative procedure for preparing III was described wherein di-Et mucate and I were condensed and the product (m. 205-6°) acetylated. Similarly were prepared the following II (R and m.p. given): L-EtO₂CCH₂CH₂CH(CO₂Et)NH, 147-8° (MeOH); L-EtO₂CCH₂CH(CO₂Et)NH, 140-1° (EtOAc); L-MeSCH₂CH₂CH(CO₂Et)NH, 191-2° (EtOAc); EtO₂CCH₂NMe, 78-9° (EtOH); L-EtO₂CCH(Me)NH, 192-5° (EtOH).

IT Inflammation
(-inhibiting substances, N,N-carboxyalkylmucamides as)

IT Alanine, N,N'-mucoyldi-, L-, di-Et ester, tetraacetate
Aspartic acid, N,N'-mucoyldi-, L-, tetra-Et ester, tetraacetate
Glutamic acid, N,N'-mucoyldi-, L-, tetra-Et ester, tetraacetate
Glycine, N,N'-mucoyldi-, diethyl ester, tetraacetate
Methionine, N,N'-mucoyldi-, L-, di-Et ester, tetraacetate

IT 101502-38-9, Sarcosine, N,N'-mucoyldi-, diethyl ester, tetraacetate
(preparation of)

IT 5627-20-3, Mucamide
(N,N'-carboxyalkyl derivs.)

=> b hcao

FILE 'HCAOLD' ENTERED AT 13:51:00 ON 13 MAY 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

PRE-1967 CHEMICAL ABSTRACTS FILE WITH HOUR-BASED PRICING

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

Search done by Noble Jarrell

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> d all l16 tot

L16 ANSWER 1 OF 2 HCAOLD COPYRIGHT 2005 ACS on STN

AN CA56:11449g CAOLD

TI mucic acid derivs.

AU Morel, Charles

PA Geigy, J. R., A.-G.

DT Patent

PATENT NO.	KIND	DATE
------------	------	------

PI CH 354788

IT 29214-62-8 98075-57-1 101502-37-8 101502-38-9 101502-46-9 106217-01-0
106684-43-9 107541-49-1

L16 ANSWER 2 OF 2 HCAOLD COPYRIGHT 2005 ACS on STN

AN CA53:12186a CAOLD

TI tetraacetylmucyl-N,N'-bis(aminomonocarboxylic acid) dialkyl esters and
tetraacetylmucyl-N,N'-bis(aminodicarboxylic acid) tetraalkyl esters

PA Geigy, J. R., A.-G.

DT Patent

PATENT NO.	KIND	DATE
------------	------	------

PI GB 807601

IT 101502-37-8 101502-38-9 101502-46-9 106217-01-0 106684-43-9
107541-49-1

=> b home

FILE 'HOME' ENTERED AT 13:51:03 ON 13 MAY 2005

=>